

FM/MW/LW STEREO SYNTHESIZER TUNER

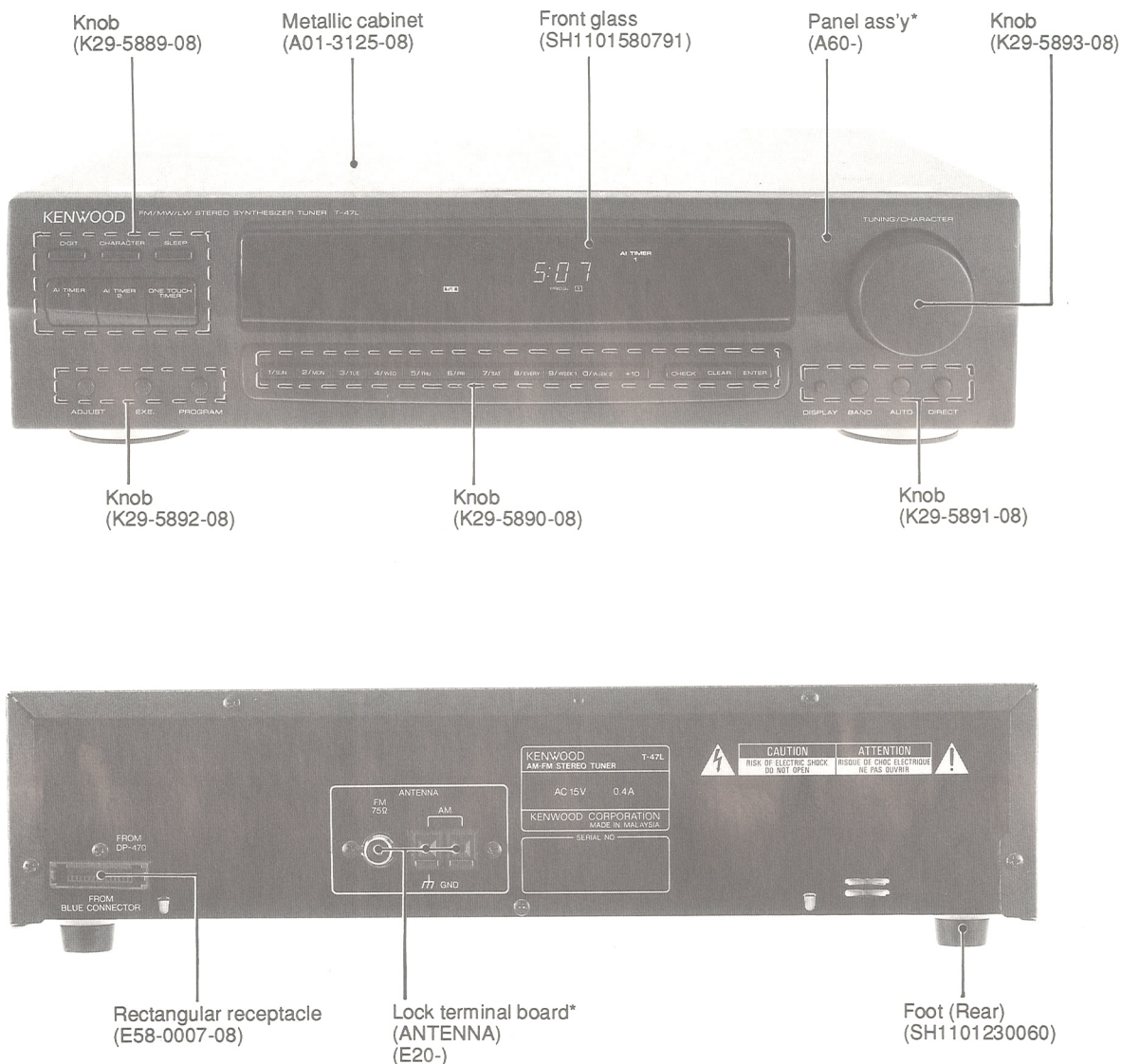
# T-47/L

## SERVICE MANUAL

(M-47)

# KENWOOD

© 1993-9 PRINTED IN JAPAN  
B51-4738-00 (S) 2318



T-47 and T-47L don't have a power supply transformer. Use A-47 or RM-90PS power supply to supply power, if neither is available, adjust to operate as instructed on page 9.

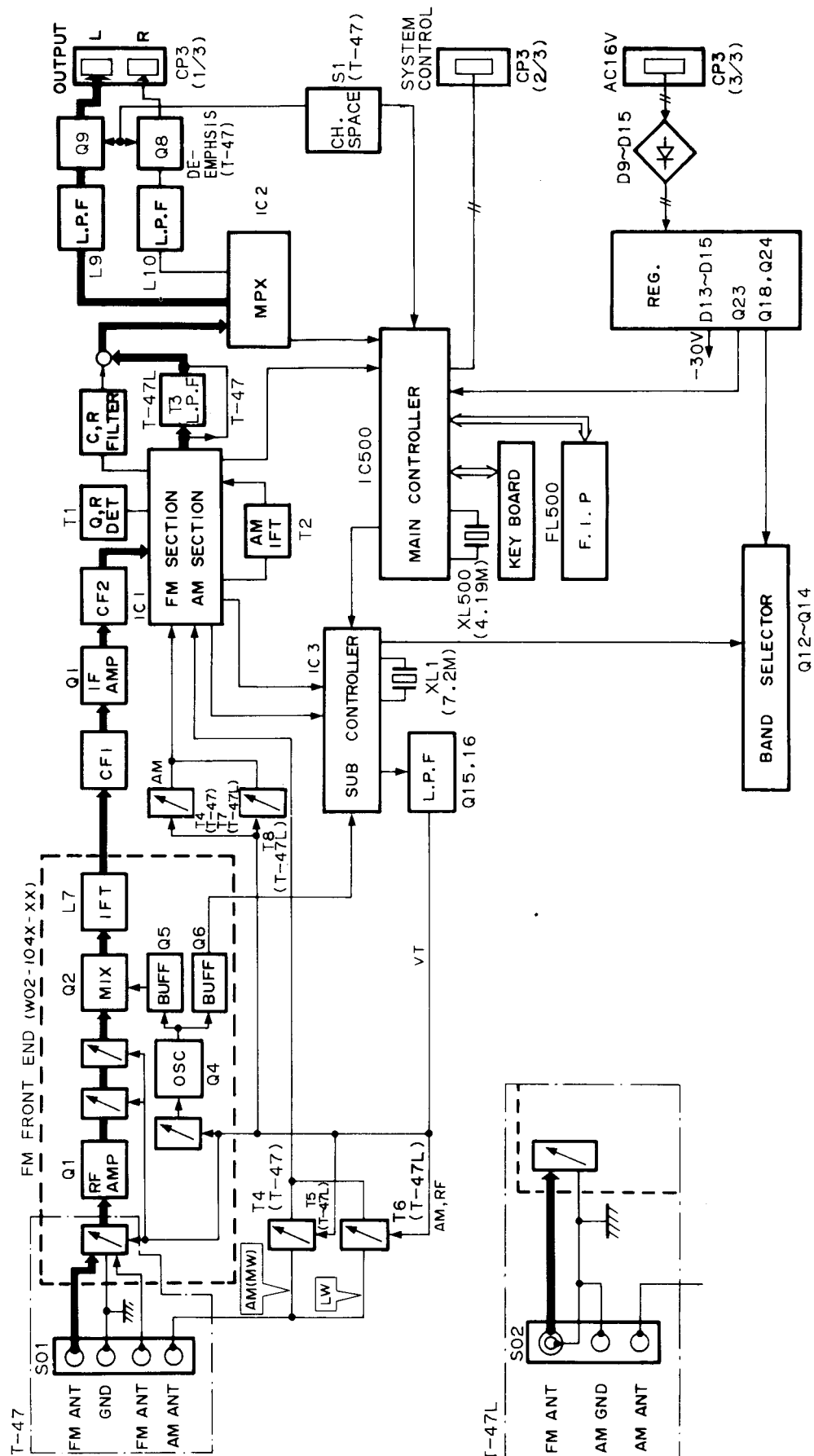
When turning the power on, short the connector pin of CN201 (X05-B/2).

\* Refer to parts list on page 26.

CONTENTS

BLOCK DIAGRAM.....	3	PC BOARD (E, T type) .....	17
CIRCUIT DESCRIPTION.....	4	PC BOARD (M, X type).....	19
ADJUSTMENT.....	7	SCHEMATIC DIAGRAM .....	21
REGLAGE.....	7	EXPLODED VIEW .....	25
ABGLEICH.....	7	PARTS LIST .....	26
WIRING DIAGRAM.....	15	SPECIFICATIONS .....	BACK COVER

## BLOCK DIAGRAM

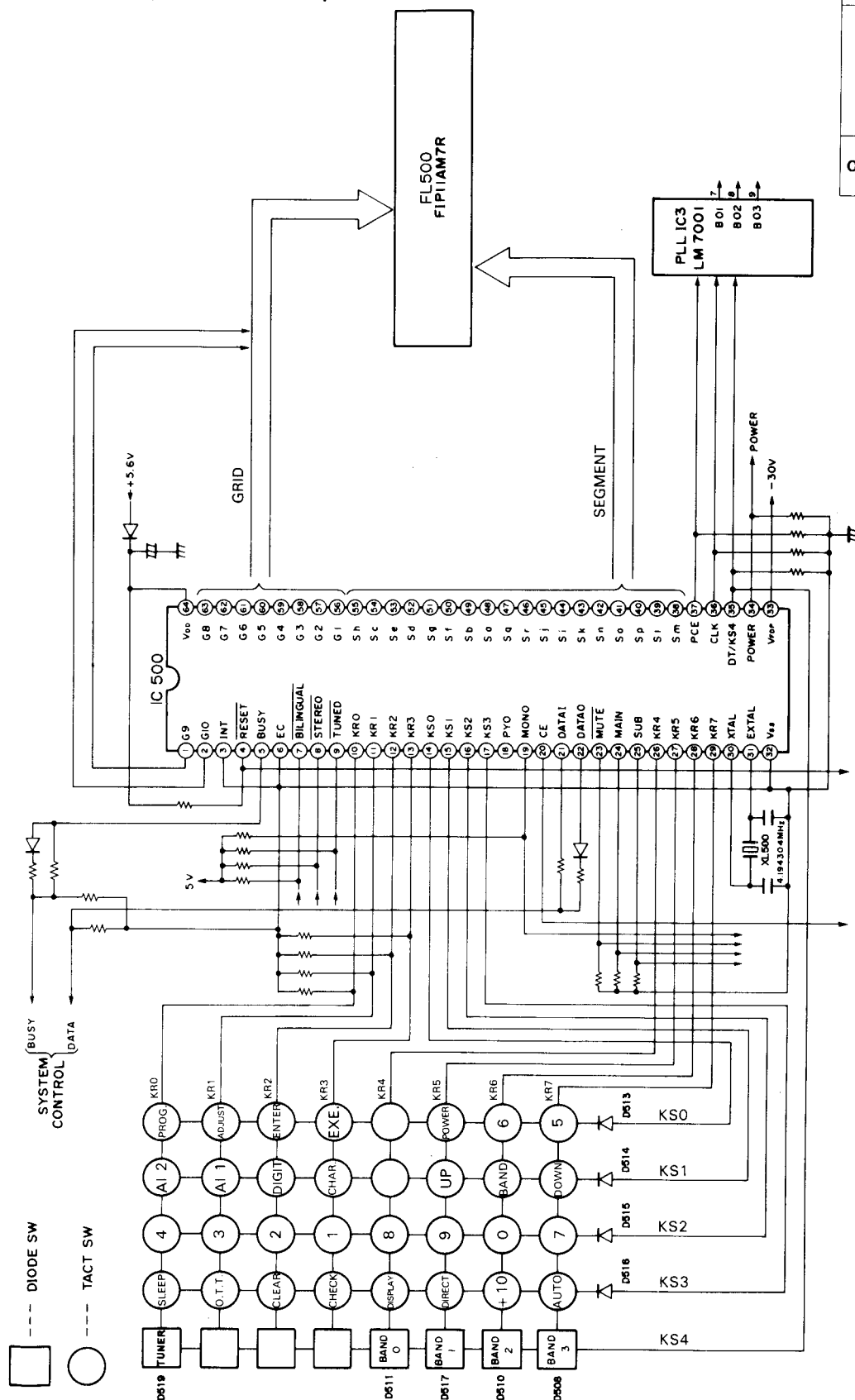


## CIRCUIT DESCRIPTION

Block diagram of surrounding tuner microprocessor  
CXP50216-104S (FL PCB: IC500)

BAND SELECT

DESTINATION	BAND	7pin	8pin	9pin
J	FM	L	H	L
	AM	L	L	H
	VHF L	H	H	L
	VHF H	H	H	H
	UHF	H	L	L
Other	FM	H	H	L
	AM	H	L	H
	LW	L	H	H





## CIRCUIT DESCRIPTION

## Pin functions

Pin No.	Pin name	I/O	Name	Operation description	
1, 2	T1, T0	O	G9, G10	FL grid output	9G, 10G
3	INT	I		No use	(GND)
4	RST	I	RESET	Reset input	H: NORMAL L: RESET
5	ADI/PB3	I/O	BUSY	System control BUSY input/output	
6	EC	I		No use	(GND)
7	SC/PX0	I	BIL	BILINGUAL	H: NORMAL L: BILINGUAL
8	SO/PX1	I	STEREO	Stereo signal input	H: MONO L: STEREO
9	SI/PX2	I	TUNED	Tuning signal input	H: NO L: TUNED
10 ~ 13	PF0 ~ PF3	I	KR0 ~ KR3	Key return input	H: ON L: OFF
14 ~ 17	PE0 ~ PE3	O	KS0 ~ KS3	Key scan output	H: ON L: OFF
18	PY0	O		No use	(OPEN)
19	PWM/PY1	O	MONO	Forced MONO output	H: MONO L: STEREO
20	WP/PY2	I	CE	AC OFF detection input	H: AC ON L: AC OFF
21	RMC/PY3	I	DATAI	System control DATA input	
22	PD0	O	DATAO	System control DATA output	
23	PD1	O	MUTE	Line mute	H: MUTE OFF L: MUTE ON
24	PD2	O	MAIN	No use	
25	PD3	O	SUB	No use	
26 ~ 29	PC0 ~ PC3	I	KR4 ~ KR7	Key return input	H: ON L: OFF
30	XTAL			Quartz oscillator 4.194304MHz	
31	EXTAL			Quartz oscillator 4.194304MHz	
32	V <sub>SS</sub>			GND pin	
33	V <sub>FDP</sub>			- 30 V	
34	PH0/S0	O	POWER	POWER ON/OFF control	H: ON L: OFF
35	PH1/S1	O	DT/KS4	PLL DATA output	Key scan output for destination SW
36	PH2/S2	O	CLK	PLL CLOCK output	
37	PH3/S3	O	PCE	PLL CE output	
38 ~ 55	PG0/S4 ~ S23/T8	O	Sm ~ Sh	FL segment output (m, l, p, o, n, k, i, j, r, q, a, b, f, g, d, e, c, h)	
56 ~ 63	S22/T9 ~ T2	O	G1 ~ G8	FL grid output	1G ~ 8G
64	V <sub>DD</sub>			+ 5 V (Power supply)	

## CIRCUIT DESCRIPTION

### Test mode

- (1) Method of setting  
While pressing the DOWN key, turn AC ON.
- (2) Contents  
Power ON  
FLL all lit  
Test frequency setting (Table 1)
- (3) Method of canceling  
Clearing the FL all lit state is performed by numeral key,  
BAND key, UP/DOWN key or POWER key.

### Initial status setting (reset)

- (1) Method  
While pressing the ENTER key, turn AC ON.
- (2) Contents  
The all memory is cleared and the initial status is fully re-  
stored. At this time, however, test frequency is newly  
memorized in the preset memory. (Table 1)

Destination Preset channel	T-47				T-47L	
	J TYPE		M, X TYPE		T, E TYPE	
01ch	FM	83.5 MHz	FM	98.0 MHz	FM	98.0 MHz
02ch	FM	90.0 MHz	FM	108.0 MHz	FM	108.0 MHz
03ch	AM	630 kHz	AM	630 kHz	AM	630 kHz
04ch	AM	990 kHz	AM	990 kHz	AM	990 kHz
05ch	AM	1440 kHz	AM	1440 kHz	AM	1440 kHz
06ch	AM	1602 kHz	AM (AM 1610 kHz)	1602 kHz	AM	1602 kHz
07ch	TV	3 ch	FM	87.5 MHz	LW	162 kHz
08ch	TV	8 ch	FM	87.5 MHz	LW	216 kHz
09ch	TV	35 ch	FM	87.5 MHz	LW	270 kHz
10ch	FM	89.1 MHz	FM	89.1 MHz	FM	89.1 MHz
11ch	TV	1 ch	FM	87.5 MHz	LW	281 kHz
12ch	TV	3 ch	FM	87.5 MHz	FM	87.5 MHz
13ch	TV	4 ch	FM	87.5 MHz	FM	87.5 MHz
14ch	TV	8 ch	FM	87.5 MHz	FM	87.5 MHz
15ch	TV	12 ch	FM	87.5 MHz	FM	87.5 MHz
16ch	TV	13 ch	FM	87.5 MHz	FM	87.5 MHz
17ch	TV	35 ch	FM	87.5 MHz	FM	87.5 MHz
18ch	TV	62 ch	FM	87.5 MHz	FM	87.5 MHz
19ch	FM	76.0 MHz	FM	87.5 MHz	FM	87.5 MHz
20ch ~ 30ch	FM	76.0 MHz	FM	87.5 MHz	FM	87.5 MHz

(Table 1)

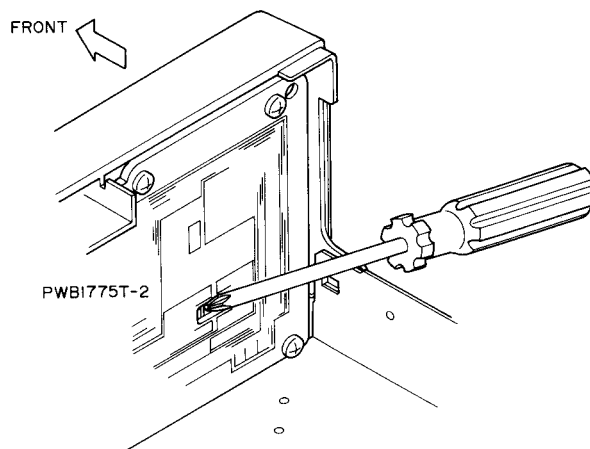
### Conditions by destination

Desti- nation type	Destination switches				Band	Receiving frequency range	Inter-channel space	Intermediate frequency	PLL reference frequency
	B3	B2	B1	B0					
T-47	J	0	0	0	FM	76.0 ~ 90.0 MHz	100 kHz	- 10.75 MHz	25 kHz
					AM	531 ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz
					TV	1 ~ 62ch	6 MHz	- 10.75 MHz	25 kHz
	M	1	1 or 0	1	FM	87.5 ~ 108.0 MHz	100 kHz or 50 kHz	+ 10.7 MHz	50 kHz
					AM	531 ~ 1602 kHz or 530 ~ 1610 kHz	9 kHz or 10 kHz	+ 450 kHz	10 kHz
	K,P	1	0	0	FM	87.5 ~ 108.0 MHz	100 kHz	+ 10.7 MHz	50 kHz
T-47L	X	1	1	0	AM	530 ~ 1700 kHz	10 kHz	+ 450 kHz	10 kHz
					FM	87.5 ~ 108.0 MHz	50 kHz	+ 10.7 MHz	50 kHz
					AM	531 ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz
	T,E	1	1	0	FM	87.5 ~ 108.0 MHz	50 kHz	+ 10.7 MHz	50 kHz
					MW	531 ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz
					LW	153 ~ 281 kHz	1 kHz	+ 450 kHz	1 kHz

## ADJUSTMENT/REGLAGE/ABGLEICH

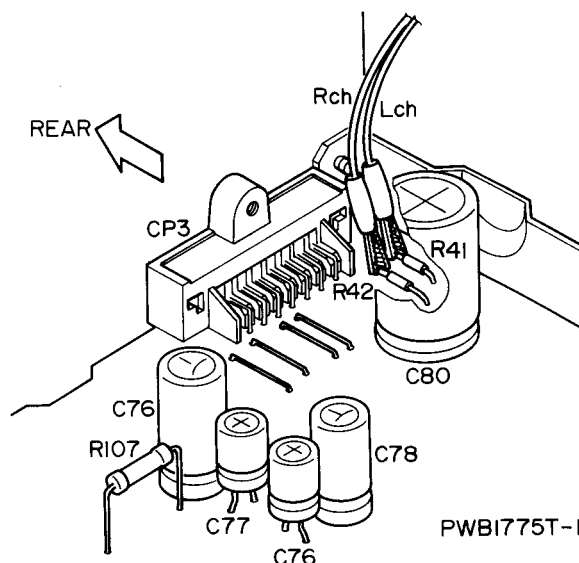
### English

- (1) To connect T-47 and the power supply (RM-90PS) or A-47, please use the 15-pin connector cord (Part No. E30-2668-05).
- (2) When operating T-47 only, apply AC 16 V to the jumper wire between pin 14 and pin 15 of the 15-pin connector (BLUE).  
**When turning the power on, short the jumper wire of the POWER ON POINT (nearby the "ADJUST" key of FL PCB).**
- (3) Connect the output to CP3 1P(L), 3P(R) or resistors R41(L), R42(R).



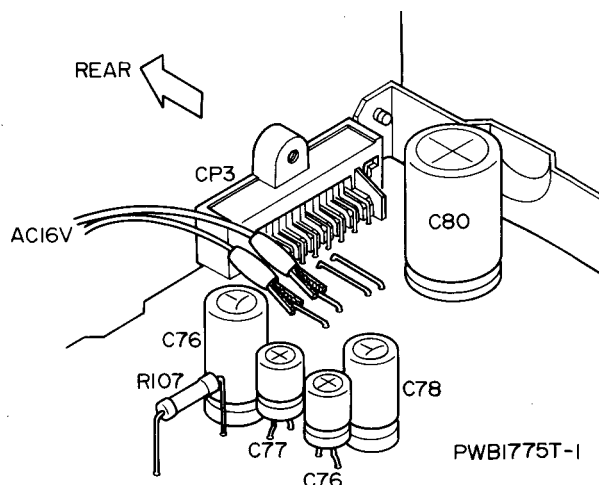
### French

- (1) Pour raccorder le T-47 et la source d'alimentation (RM-90PS) ou A-47, utiliser le connecteur à 15 broches (Pièce No. E30-2668-05).
- (2) Lors de l'utilisation du T-47 uniquement, appliquer un courant CA 16 V au cavalier entre la broche 14 et 15 du connecteur à 15 broches (BLEU).  
**A la mise sous tension, court-circuiter le cavalier du POINT DE MISE SOUS TENSION (près de la touche "ADJUST" de FL PCB).**
- (3) Quand la sortie est CP3 1P(L), 3P(R) ou connecter au rhéostat R41(L), R42(R).



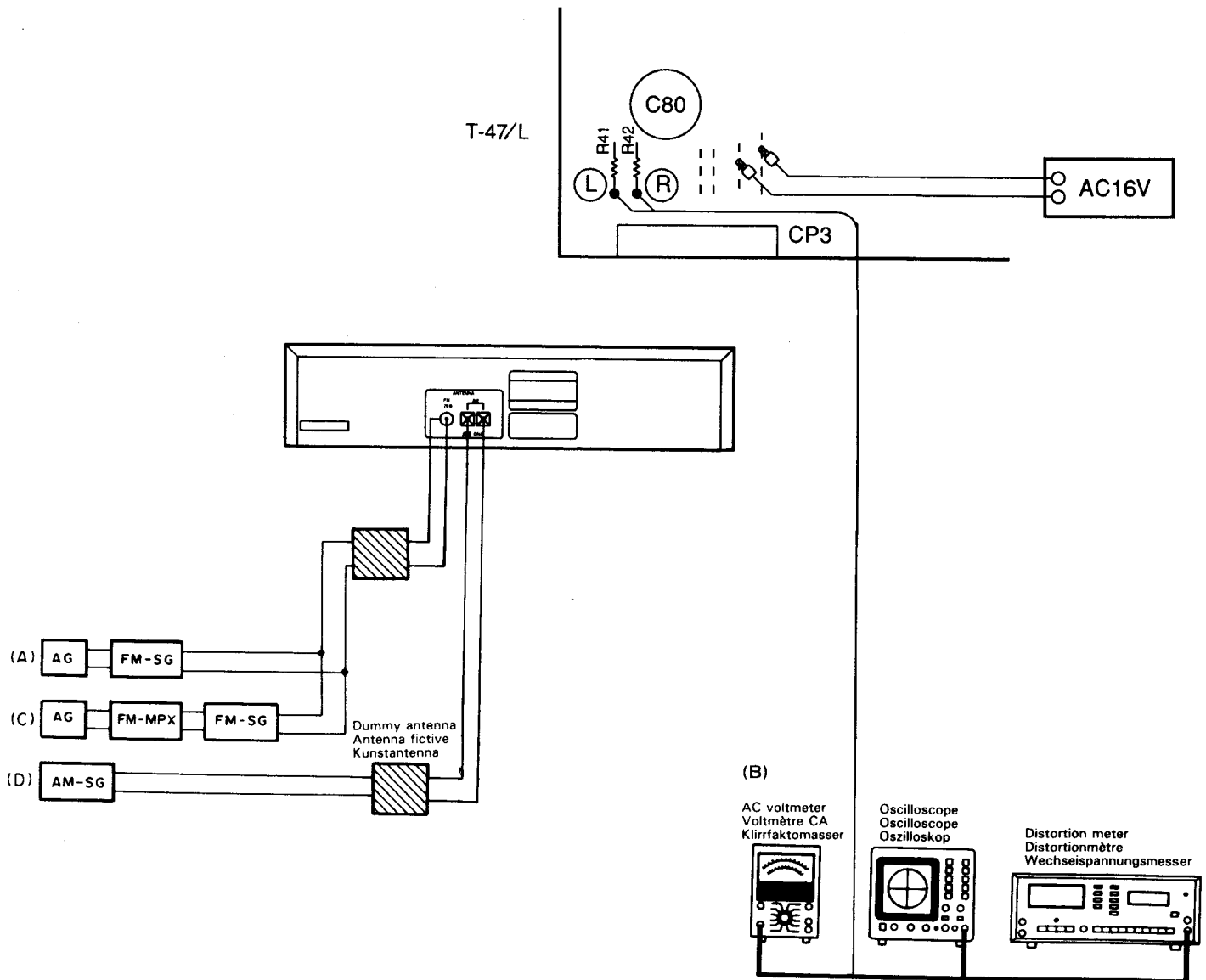
### Germany

- (1) Zum Anschließen des T-47 und der Betriebsstromversorgung (RM-90PS) oder A-47 bitte den 15poligen Stecker (Teil Nr. E30-2668-05) verwenden.
- (2) Wenn nur T-47 betrieben wird, 16 V Wechselstrom an den Jumperdraht zwischen Pin 14 und Pin 15 des 15poligen Steckers (BLAU) anlegen.  
**Beim Einschalten den Jumperdraht des EINSCHALTPUNKTS (in der Nähe der "ADJUST" Taste der FL-Leiterplatte) kurzschließen.**
- (3) Wenn der Ausgang CP3 1P(L), 3P(R) an den Widerstand (R41 (L), R42 (R)) anschließen.




# T-47/L

## ADJUSTMENT/REGLAGE/ABGLEICH




T-47/L

## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>FM SECTION</b> Unless otherwise specified, the individual switches should be set as following: <b>BAND: FM MODE: FM MODE/AUTO</b>							
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev 60dB $\mu$ (ANT input)	Connect a DC voltmeter between terminal of TP1	MONO 98.0MHz	T1	0 $\pm$ 30mV	(b)
2	TUNING LEVEL	(A) 98.0MHz 0 dev 24dB $\mu$ (ANT input)	—	98.0MHz	VR2	Adjust VR2 so that FL500(TUNED) goes off. Then, adjust VR1 and stop at the point where FL500 (TUNED) goes on.	
3	FM BAND WIDTH	(A) 98.025MHz 97.975MHz 0 dev 60dB $\mu$ (ANT input)	—	98 MHz	VR1	FMSG 98.025MHz $\pm$ 3kHz FMSG 97.975MHz $\pm$ 3kHz where FL500 (TUNED) goes on.	
4	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, $\pm 68.25$ kHz dev Selector: L or R 60dB $\mu$ (ANT input)	(B)	98.0MHz	L7 (Front end)	Minimum distortion. (L or R)	
5	SEPARATION	(C) 98.0MHz 1kHz, $\pm 68.25$ kHz dev Selector: L or R 60dB $\mu$ (ANT input)	(B)	98.0MHz	VR3	Minimum crosstalk.	
<b>AM SECTION</b> Keep the AM loop antenna installed. <b>BAND: AM(T-47)</b>							
(1)	RF ALIGNMENT (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	YEL COIL of T4 L3	Maximum amplitude and symmetry of the oscilloscope display.	
(2)	RF ALIGNMENT (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	—	Maximum amplitude and symmetry of the oscilloscope display.	
(3)	IF	(D) 990kHz 4kHz, 30% mod	(B)	990kHz	T2	Adjust the 4kHz audio output to the DIP point. 	

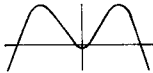
T-47/L

## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>AM-MW SECTION</b> Keep the AM loop antenna installed. <b>BAND:MW (T-47L)</b>							
(1)	BAND EDGE (1)	—	Connect a DC voltmeter between R65 marking and GND.	531 kHz	T8	1.1V $\pm$ 0.1V	(a)
(2)	BAND EDGE (2)	—	Connect a DC voltmeter between R65 marking and GND.	1602 kHz	—	Confirm 7.4V $\begin{smallmatrix} +1.0 \\ -0.6 \end{smallmatrix}$ V	(a)
Repeat alignments (1) and (2) several times.							
(3)	RF ALIGNMENT (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	T6	Maximum amplitude and symmetry of the oscilloscope display.	
(4)	RF ALIGNMENT (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	TO2	Maximum amplitude and symmetry of the oscilloscope display.	
(5)	IF	(D) 990kHz 4kHz, 30% mod	(B)	990kHz	T2	Adjust the 4kHz audio output to the DIP point. 	
Repeat alignments (3) and (4) several times.							
<b>AM-LW SECTION</b> Keep the AM loop antenna installed. <b>BAND:LW (T-47L)</b>							
(6)	BAND EDGE (1)	—	Connect a DC voltmeter between R65 marking and GND.	153 kHz	T7	1.5V $\pm$ 0.1V	(a)
(7)	BAND EDGE (2)	—	—	281 kHz	—	Confirm 5.5V $\pm$ 0.5V	(a)
Repeat alignments (6) and (7) several times.							
(8)	RF ALIGNMENT (1)	(D) 162kHz 400Hz, 30% mod	(B)	162kHz	T5	Maximum amplitude and symmetry of the oscilloscope display.	
(9)	RF ALIGNMENT (2)	(D) 270kHz 400Hz, 30% mod	(B)	270kHz	TO1	Maximum amplitude and symmetry of the oscilloscope display.	
Repeat alignments (8) and (9) several times.							

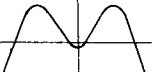
# T-47/L

## REGLAGE

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF A moins, de spécification contraire, régler les commutateurs respectifs comme suit: BANDE: FM MODE: FM MODE/AUTO							
1	DETECTEUR	(A) 98,0MHz 1kHz, ±75kHz dév 60dBμ(Entrée ANT)	Relier un voltmètre CC entre les broches où TP1	MONO 98,0MHz	T1	0±30mV	(b)
2	NIVEAU D'ACCORDER	(A) 98,0MHz 0 dév 24dBμ(Entrée ANT)	—	98,0MHz	VR2	Régler VR2 pour que FL500 (TUNED) disparaisse. Ensuite, régler VR1 et s'arrêter au point où FL500 (TUNED) apparaît.	
3	LARGEUR DE BANDE MF	(A) 98,025MHz 97,975MHz 0 dév 60dBμ(Entrée ANT)	—	98 MHz	VR1	FMSG 98,025MHz±3kHz FMSG 97,975MHz±3kHz au moment où le FL500 (TUNED) s'allume.	
4	DISTORSION (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz dév Selecteur: L ou R 60dBμ(Entrée ANT)	(B)	98,0MHz	L7 (Front end)	Distorsion minimale. (L ou R)	
5	SEPARATION	(C) 98,0MHz 1kHz, ±68,25kHz dév Selecteur: L ou R 60dBμ(Entrée ANT)	(B)	98,0MHz	VR3	Diaphone minimale.	
SECTION MA Laisser l'antenne bouche MA installée. BANDE: AM(T-47)							
(1)	ALIGNEMENT RF (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	Bobine YEL de T4. L3	Amplitude et symétrie maximum de l'affichage de l'oscilloscope.	
(2)	ALIGNEMENT RF (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	—	Amplitude et symétrie maximum de l'affichage de l'oscilloscope.	
(3)	IF	(D) 990kHz 4kHz, 30% mod	(B)	990kHz	T2	Régler la sortie audio 4 kHz au point DIP. 	

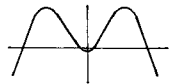
# T-47/L

## REGLAGE

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MA-MW Laisser l'antenne bouche MA installée. BANDE:MW (T-47L)							
(1)	LIMITE DE BANDE (1)	—	Relier un voltmètre CC entre les R65 marque et GND.	531 kHz	T8	1,1V±0,1V	(a)
(2)	LIMITE DE BANDE (2)	—	Relier un voltmètre CC entre les R65 marque et GND.	1602 kHz	—	Confirmer 7,4V <sup>+1,0</sup> <sub>-0,6</sub> V	(a)
Reprendre deux ou trois fois les opérations (1) et (2) précédentes.							
(3)	ALIGNEMENT RF (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	T6	Amplitude et symétrie maximum de l'affichage de l'oscilloscope.	
(4)	ALIGNEMENT RF (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	TO2	Amplitude et symétrie maximum de l'affichage de l'oscilloscope.	
(5)	IF	(D) 990kHz 4kHz, 30% mod	(B)	990kHz	T2	Régler la sortie audio 4 kHz au point DIP. 	
Reprendre deux ou trois fois les opérations (3) et (4) précédentes.							
SECTION MA-LW Laisser l'antenne bouche MA installée. BANDE:LW (T-47L)							
(6)	LIMITE DE BANDE (1)	—	Relier un voltmètre CC entre les R65 marque et GND.	153 kHz	T7	1,5V±0,1V	(a)
(7)	LIMITE DE BANDE (2)	—	—	281 kHz	—	Confirmer 5,5V±0,5V	(a)
Reprendre deux ou trois fois les opérations (6) et (7) précédentes.							
(8)	ALIGNEMENT RF (1)	(D) 162kHz 400Hz, 30% mod	(B)	162kHz	T5	Amplitude et symétrie maximum de l'affichage de l'oscilloscope.	
(9)	ALIGNEMENT RF (2)	(D) 270kHz 400Hz, 30% mod	(B)	270kHz	TO1	Amplitude et symétrie maximum de l'affichage de l'oscilloscope.	
Reprendre deux ou trois fois les opérations (8) et (9) précédentes.							

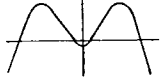
T-47/L

ABGLEICH

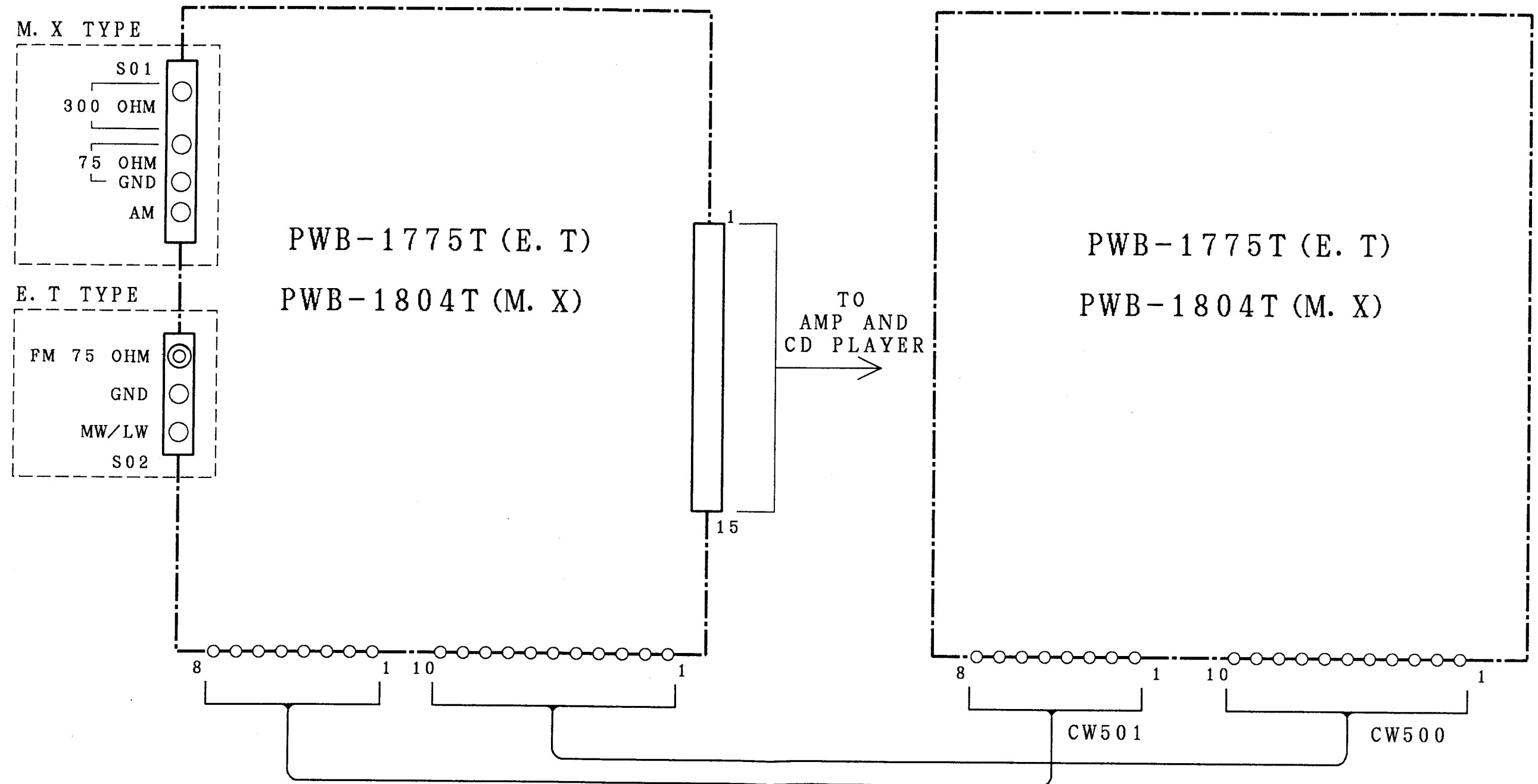
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-EMPFANGSABTEILUNG Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: BAND: FM MODE: FM MODE/AUTO							
1	DETEKTOR	(A) 98,0MHz 1kHz, ±75kHz Hub 60dBµ(Ant-Eingang)	Einen Gleichspannungs- messer zwischen TP1	MONO 98,0MHz	T1	0±30mV	(b)
2	ABSTIMM PEGEL	(A) 98,0MHz 0 Hub 24dBµ(Ant-Eingang)	—	98,0MHz	VR2	VR2 so einstellen, daß FL500 (TUNED) erlischt. Dann VR1 und Sptze an der Stelle einstellen, wo FL500 (TUNED) erlischt.	
3	FM-BANDBREITE	(A) 98,025MHz 97,975MHz 0 Hub 60dBµ(Ant-Eingang)	—	98 MHz	VR1	FMSG 98,025MHz±3kHz FMSG 97,975MHz±3kHz wobei den FL500 (TUNED) anzeiger leuchtet wird.	
4	KLIRRFAKTOR (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz Hub Wähler: L oder R 60dBµ(Ant-Eingang)	(B)	98,0MHz	L7 (Front end)	Minimal Klirrfaktor. (L oder R)	
5	TRENNUNG	(C) 98,0MHz 1kHz, ±68,25kHz Hub Wähler: L oder R 60dBµ(Ant-Eingang)	(B)	98,0MHz	VR3	Optimale Trennung.	
MW-EMPFANGSABTEILUNG Die MW-Rahmenantenne angebracht lassen. BAND: AM(T-47)							
(1)	RF-ANGLEICH (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	YEL SPULE von T4 L3	Maximale Amplitude und Symmetrie der Oszilloskop-Anzeige.	
(2)	RF-ANGLEICH (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	—	Maximale Amplitude und Symmetrie der Oszilloskop-Anzeige.	
(3)	IF	(D) 990kHz 4kHz, 30% mod	(B)	990kHz	T2	Den 4 kHz Audioausgang am Punkt DIP einstellen. 	

T-47/L

ABGLEICH

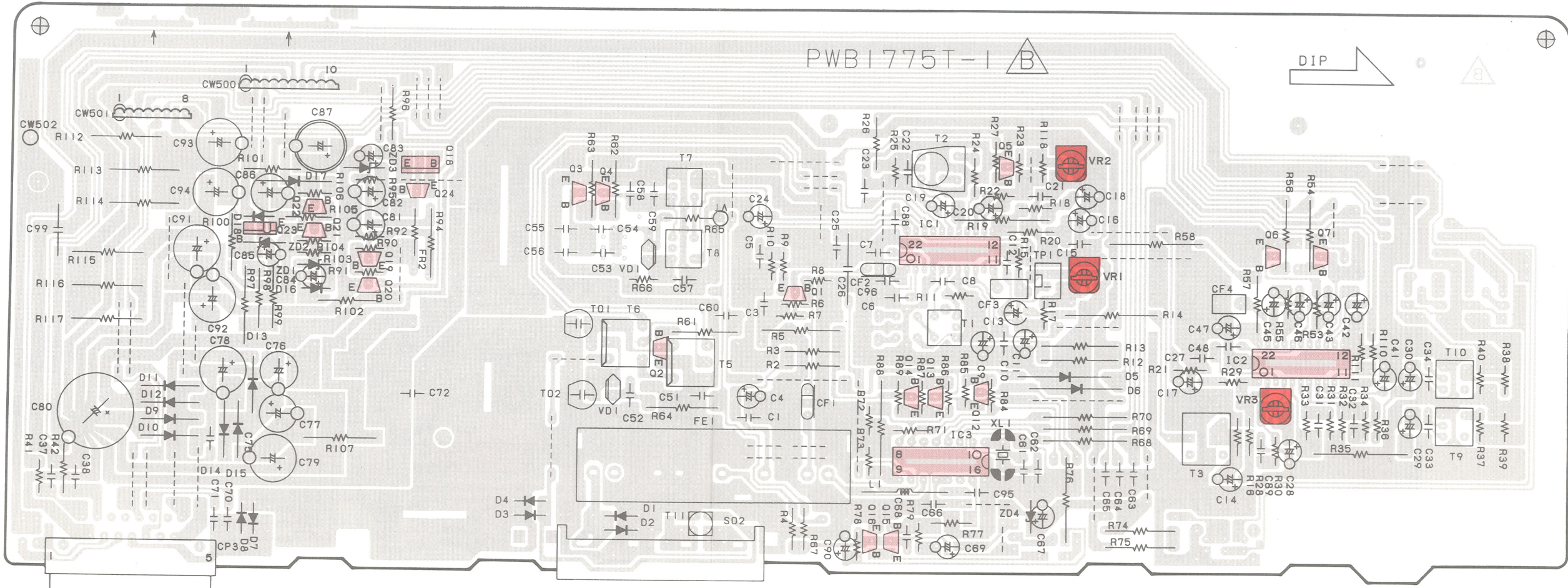
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
MW-EMPFANGSABTEILUNG(MW) Die MW-Rahmenantenne angebracht lassen. BAND:MW (T-47L)							
(1)	BANDKANTE (1)	—	Einen Gleichspannungs- messer zwischen R65 und GND anschließen.	531 kHz	T8	1,1V±0,1V	(a)
(2)	BANDKANTE (2)	—	Einen Gleichspannungs- messer zwischen R65 und GND anschließen.	1602 kHz	—	7,4V <sup>+1,0</sup> <sub>-0,6</sub> V prüfen.	(a)
Obigen Schritte (1) und (2) zwei bis dreimal wiederholen.							
(3)	RF-ANGLEICH (1)	(D) 630kHz 400Hz, 30% mod	(B)	630kHz	T6	Maximale Amplitude und Symmetrie der Oszilloskop-Anzeige.	
(4)	RF-ANGLEICH (2)	(D) 1440kHz 400Hz, 30% mod	(B)	1440kHz	TO2	Maximale Amplitude und Symmetrie der Oszilloskop-Anzeige.	
(5)	IF	(D) 990kHz 4kHz, 30% mod	(B)	990kHz	T2	Den 4 kHz Audioausgang am Punkt DIP einstellen. 	
Obigen Schritte (3) und (4) zwei bis dreimal wiederholen.							
MW-EMPFANGSABTEILUNG(LW) Die MW-Rahmenantenne angebracht lassen. BAND:LW (T-47L)							
(6)	BANDKANTE (1)	—	Einen Gleichspannungs- messer zwischen R65 und GND anschließen.	153 kHz	T7	1,5V±0,1V	(a)
(7)	BANDKANTE (2)	—	—	281 kHz	—	5,5V±0,5V prüfen.	(a)
Obigen Schritte (6) und (7) zwei bis dreimal wiederholen.							
(8)	RF-ANGLEICH (1)	(D) 162kHz 400Hz, 30% mod	(B)	162kHz	T5	Maximale Amplitude und Symmetrie der Oszilloskop-Anzeige.	
(9)	RF-ANGLEICH (2)	(D) 270kHz 400Hz, 30% mod	(B)	270kHz	TO1	Maximale Amplitude und Symmetrie der Oszilloskop-Anzeige.	
Obigen Schritte (8) und (9) zwei bis dreimal wiederholen.							

WIRING DIAGRAM



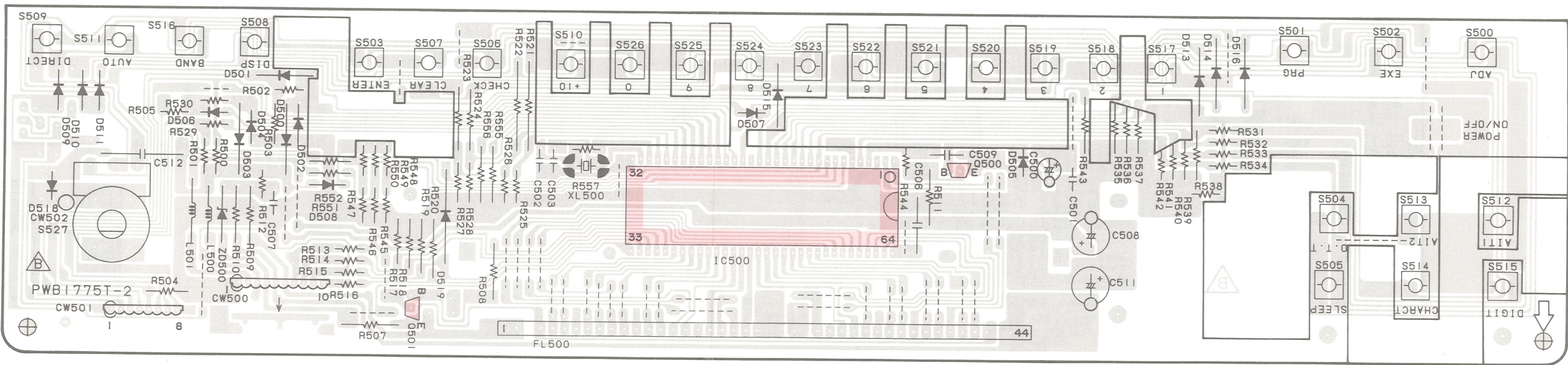


PC BOARD (Component side view) (E, T type)



FROM BLUE CONNECTOR  
FROM DP-470

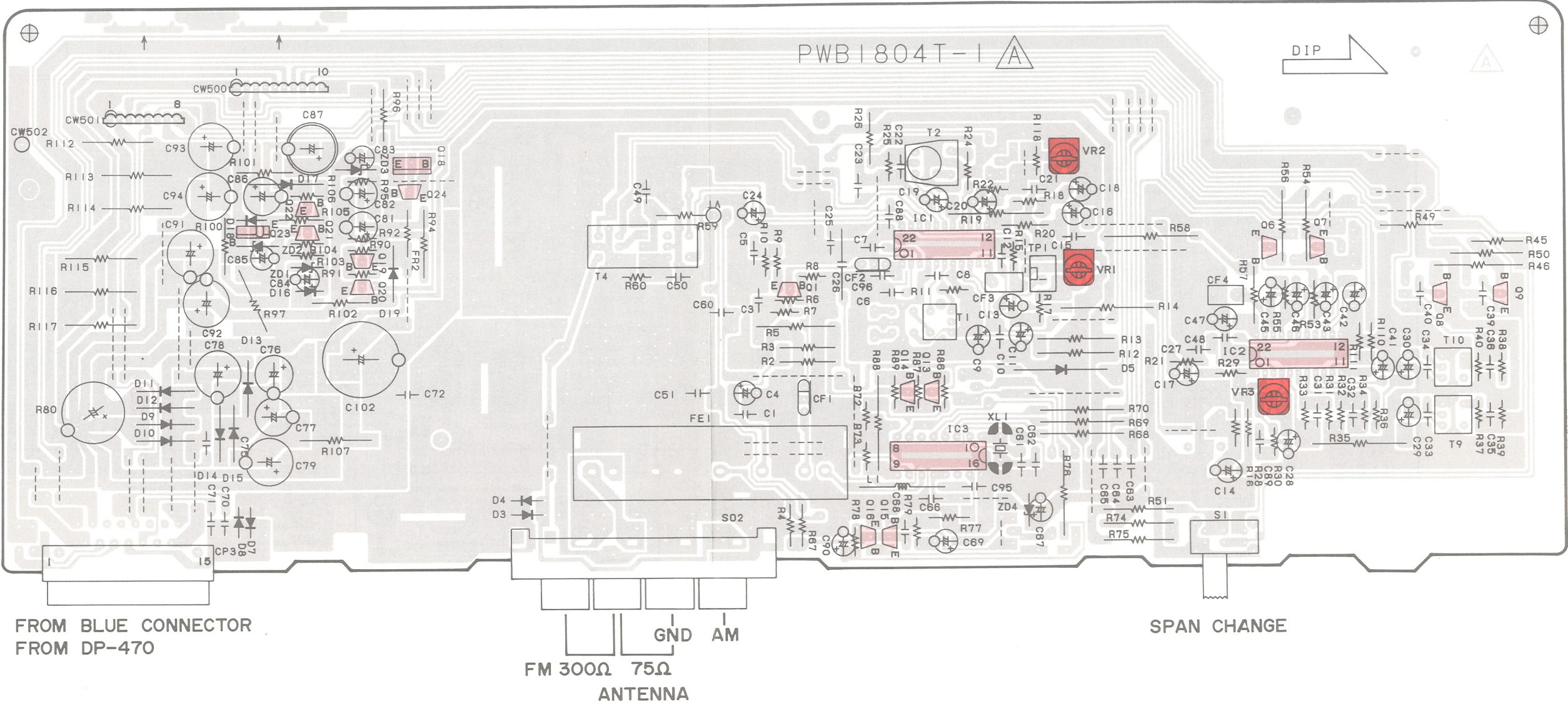
FM 75Ω  
AM  
GND  
ANTENNA



FRONT  
↓



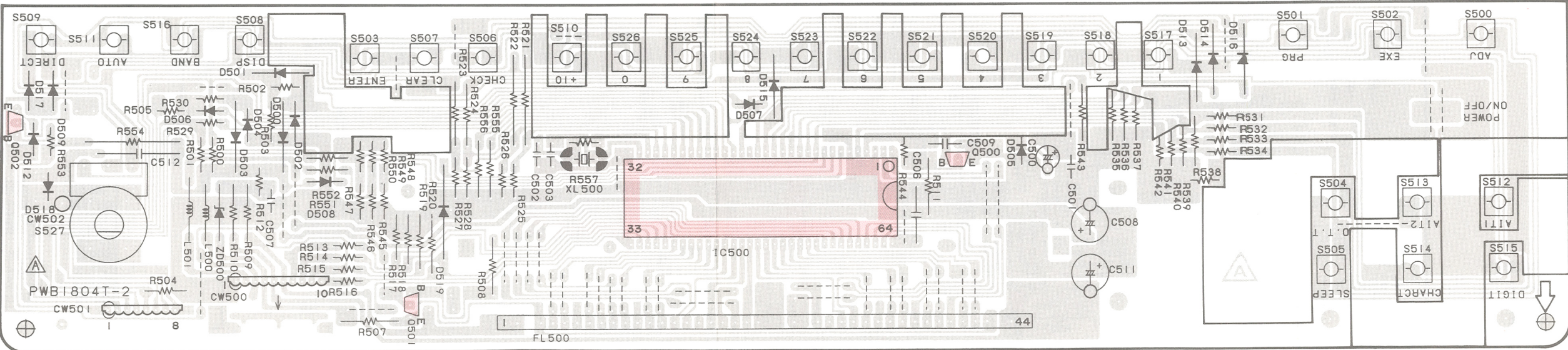
PC BOARD (Component side view) (M, X type)



FROM BLUE CONNECTOR  
FROM DP-470

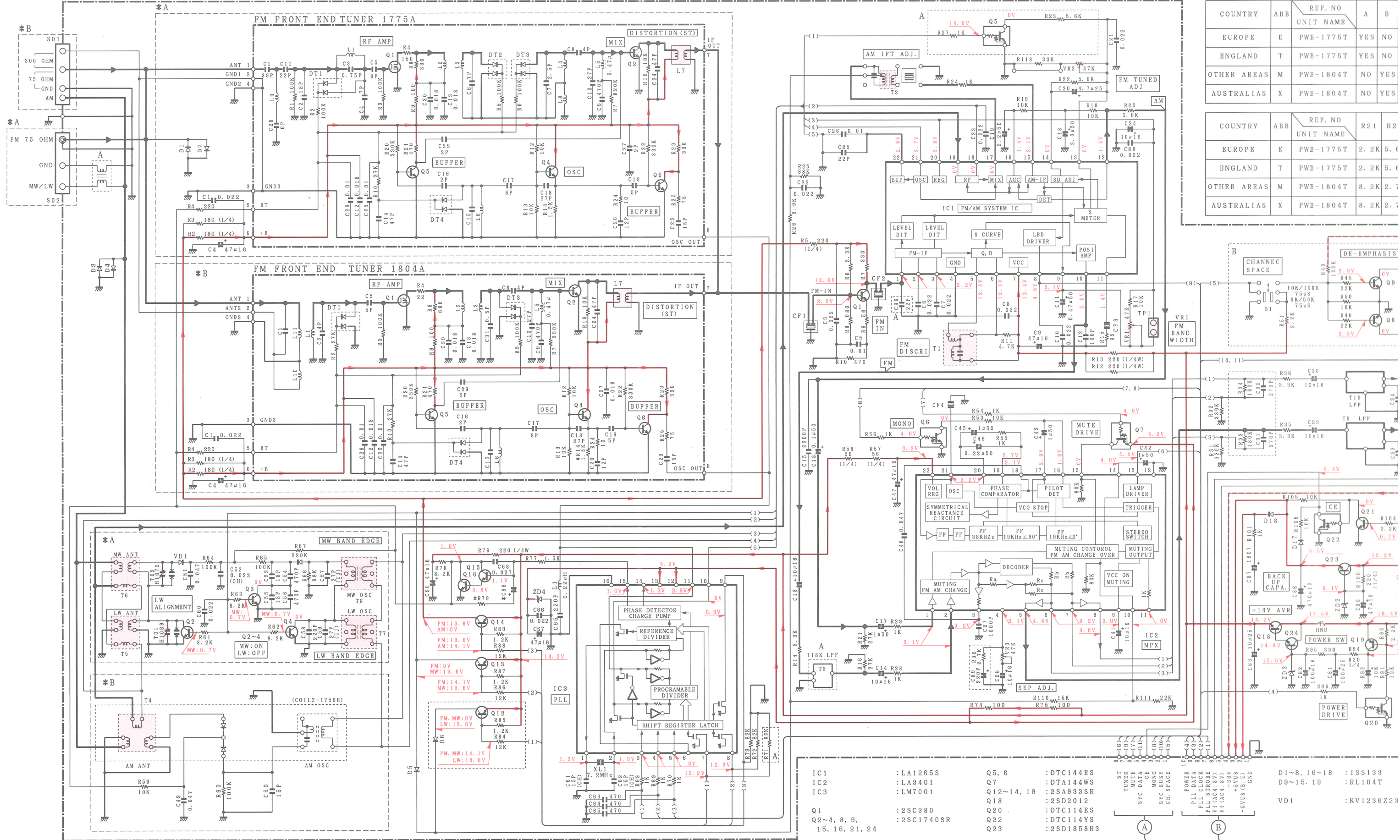
FM 300Ω 75Ω  
ANTENNA

SPAN CHANGE



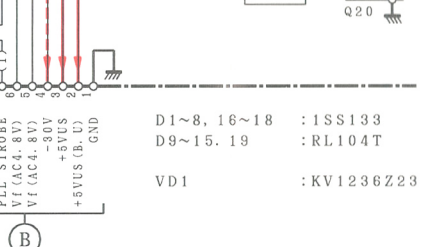
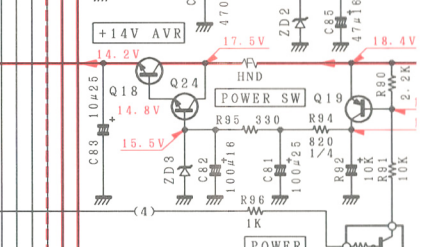
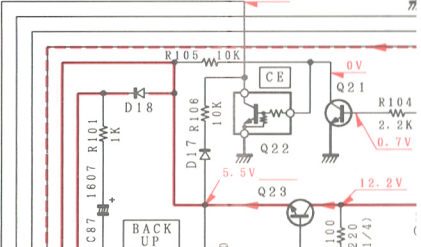
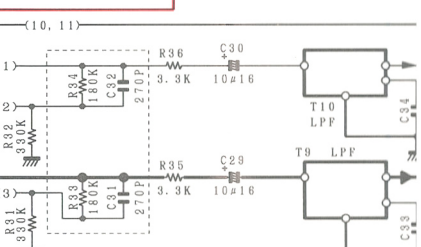
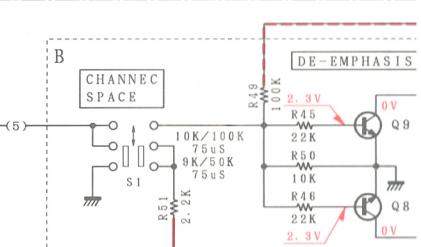
FRONT  
↓



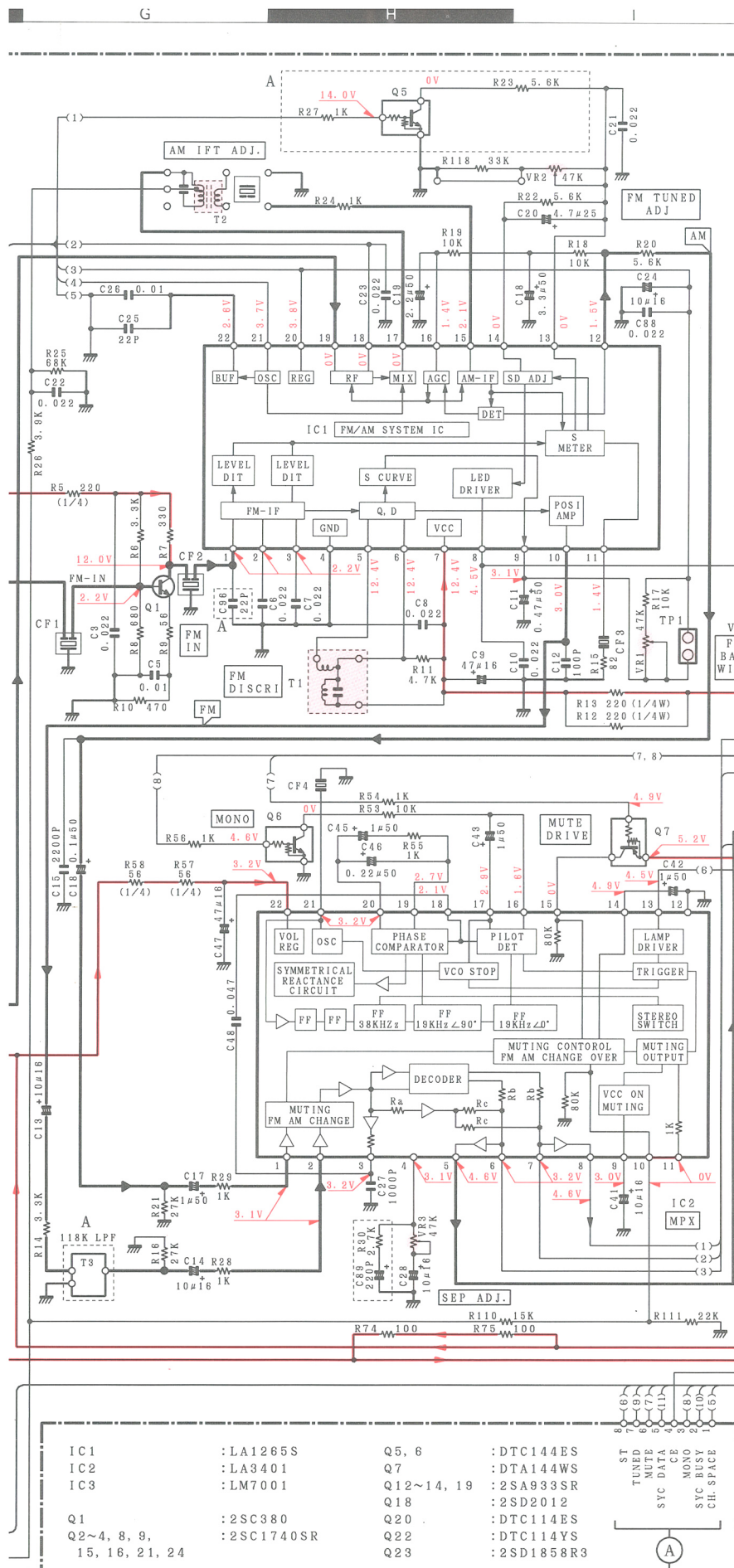


COUNTRY	ABB	REF. NO	UNIT NAME	A	B
EUROPE	E	PWB-1775T	YES	NO	
ENGLAND	T	PWB-1775T	YES	NO	
OTHER AREAS	M	PWB-1804T	NO	YES	
AUSTRALIAS	X	PWB-1804T	NO	YES	

COUNTRY	ABB	REF. NO	UNIT NAME	R21	R2
EUROPE	E	PWB-1775T	2.2K	5.6K	
ENGLAND	T	PWB-1775T	2.2K	5.6K	
OTHER AREAS	M	PWB-1804T	8.2K	2.2K	
AUSTRALIAS	X	PWB-1804T	8.2K	2.2K	

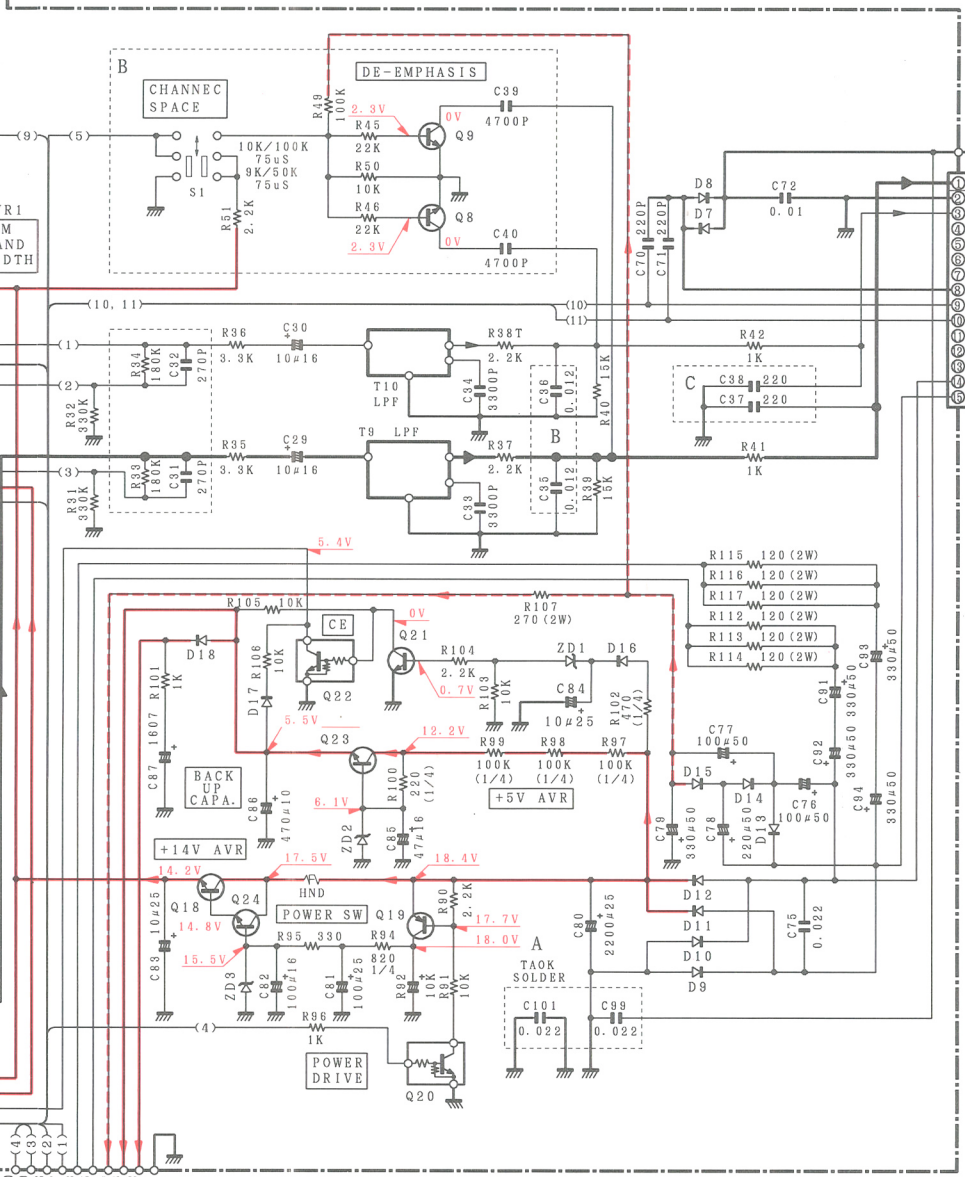






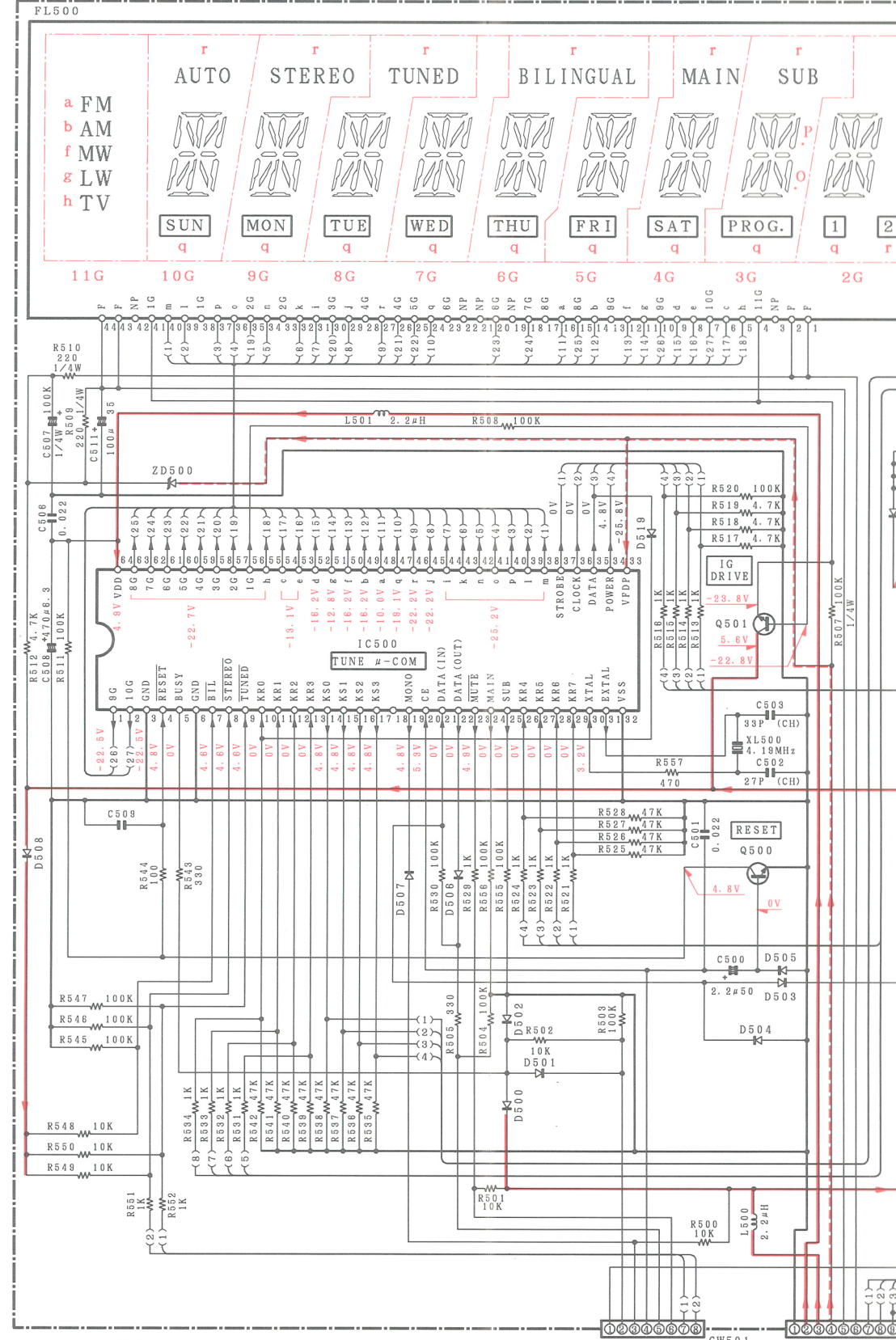
COUNTRY	ABB	REF. NO	UNIT NAME	A	B	C	FE1	CF1 CF2	C31 C32	C69	C89
EUROPE	E	PWB-1775T	YES	NO	YES	TUNER 1175A	L72-0579-08	220P	2.2μ50	220P	
ENGLAND	T	PWB-1775T	YES	NO	NO	TUNER 1175A	L72-0579-08	220P	2.2μ50	220P	
OTHER AREAS	M	PWB-1804T	NO	YES	NO	TUNER 1804A	L72-0580-08	39P	4.7μ50	68P	
AUSTRALIAS	X	PWB-1804T	NO	YES	NO	TUNER 1804A	L72-0580-08	39P	4.7μ50	68P	

COUNTRY	ABB	REF. NO	UNIT NAME	R21	R22	R30	R33 R34	R79	R97	R98	R99	VR3
EUROPE	E	PWB-1775T	2.2K	5.6K	2.7K	220K	1K	1K	100 (1/4)	100 (1/4)	47K	
ENGLAND	T	PWB-1775T	2.2K	5.6K	2.7K	220K	1K	1K	100 (1/4)	100 (1/4)	47K	
OTHER AREAS	M	PWB-1804T	8.2K	2.7K	10K	82K	470	470	NO	NO	220K	
AUSTRALIAS	X	PWB-1804T	8.2K	2.7K	10K	82K	470	470	NO	NO	220K	



COUNTRY	ABB	REF. NO	UNIT NAME	Q502	D509, 512, 517	D510, 511	R553, 554
EUROPE	E	PWB-1775T	NO	NO	YES	NO	
ENGLAND	T	PWB-1775T	NO	NO	YES	NO	
OTHER AREAS	M	PWB-1804T	YES	YES	NO	YES	
AUSTRALIAS	X	PWB-1804T	YES	YES	NO	YES	

(T-47:PWB1804T-2)(T-47L:PWB1775T-2)



COUNTRY	ABB	REF. NO	UNIT NAME	Q502	D509, 512, 517	D510, 511	R553, 554
EUROPE	E	PWB-1775T	NO	NO	YES	NO	
ENGLAND	T	PWB-1775T	NO	NO	YES	NO	
OTHER AREAS	M	PWB-1804T	YES	YES	NO	YES	
AUSTRALIAS	X	PWB-1804T	YES	YES	NO	YES	

DC voltages are as measured with a high impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

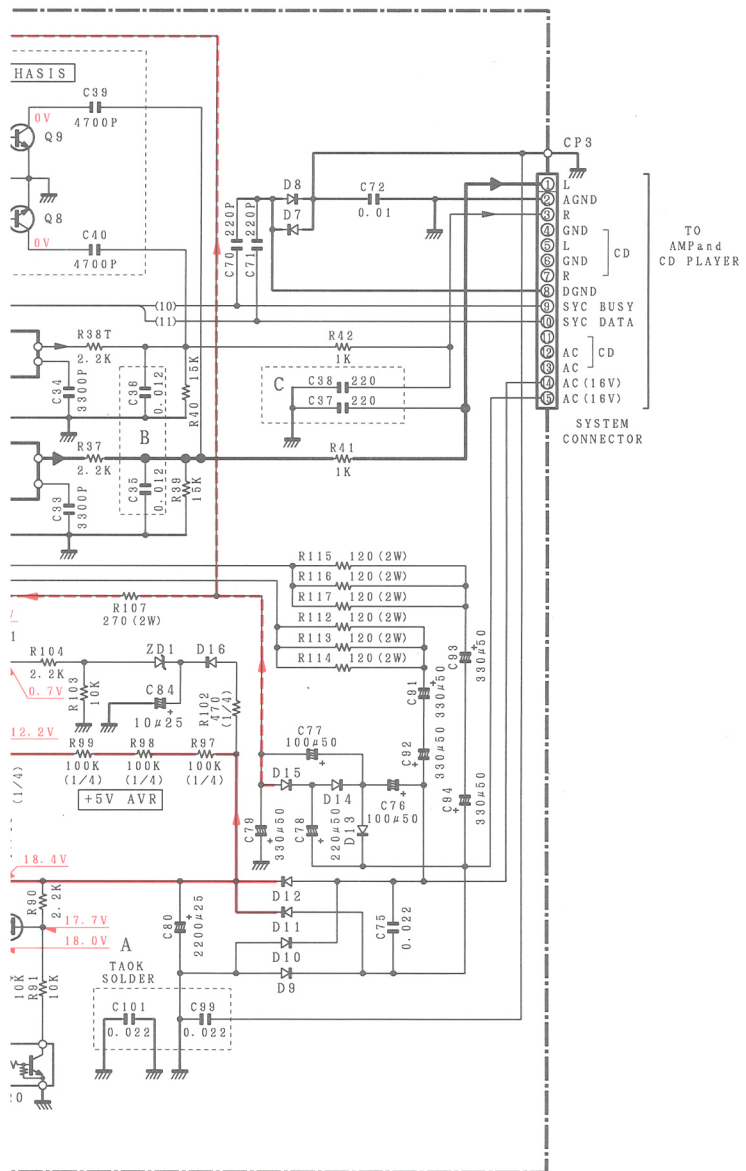
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM (avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines U (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden einzelnen Instrumenten oder Geräten u. U. gerundete eingeklammerte Gleichspannungswerte wurden bei einem MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

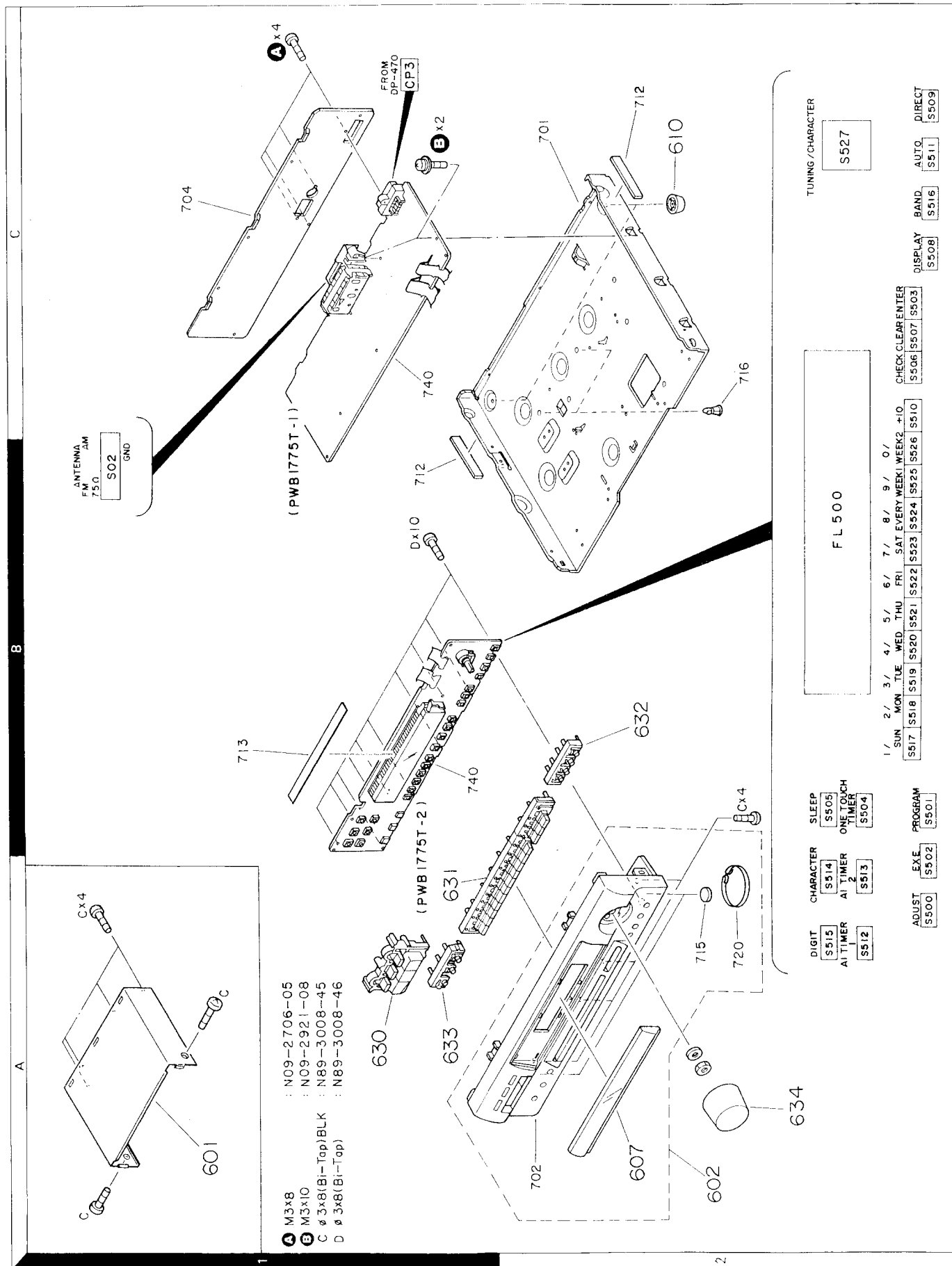


	B	C	FE1	CF1 CF2	C31 C32	C69	C89
S NO	YES	TUNER 1175A	L72-0579-08	220P	2. 2μ50	220P	
S NO	NO	TUNER 1175A	L72-0579-08	220P	2. 2μ50	220P	
YES	NO	TUNER 1804A	L72-0580-08	39P	4. 7μ50	68P	
YES	NO	TUNER 1804A	L72-0580-08	39P	4. 7μ50	68P	

	1	R22	R30	R33 R34	R79	R97	R98	R99	VR3
2K	5. 6K	2. 7K	220K	1K	1K	100 (1/4)	100 (1/4)	47K	
2K	5. 6K	2. 7K	220K	1K	1K	100 (1/4)	100 (1/4)	47K	
2K	2. 7K	10K	82K	470	470	NO	NO	220K	
2K	2. 7K	10K	82K	470	470	NO	NO	220K	



# EXPLODED VIEW



# PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No.	Address	New Parts	Parts No.	Description	Destination	Remarks
参照番号	位置	新	部品番号	部品名 / 規格	仕向	備考
T-47/L (UNIT)						
601	1A	*	A01-3125-08	METALIC CABINET	ET XMI	
602	2A	*	A60-0556-08	PANEL ASSY		
602	2A	*	A60-0557-08	PANEL ASSY		
607	2A	*	SH1101580791	FRONT GLASS	X ET	
-			B46-0096-33	WARRANTY CARD		
-			B46-0310-03	WARRANTY CARD		
		*	H50-0831-08	ITEM CARTON CASE	ET MI X	
		*	H50-0832-08	ITEM CARTON CASE		
		*	H50-1014-08	ITEM CARTON CASE		
-		*	H10-5732-08	POLYSTYRENE FOAMED FIXTURE L		
-		*	H10-5733-08	POLYSTYRENE FOAMED FIXTURE R		
-		*	H12-2186-08	PACKING FIXTURE		
-		*	H25-1513-08	PROTECTION BAG		
610	2C	*	SH1101230060	FOOT REAR		
630	1A	*	K29-5889-08	KNØB TIMER		
631	1A	*	K29-5890-08	KNØB 10 KEY		
632	2B	*	K29-5891-08	KNØB BAND		
633	1A	*	K29-5892-08	KNØB PROGRAM		
634	2A	*	K29-5893-08	KNØB TUNING		
A	1C		N09-2706-05	TAPTITE SCREW (3X8)		
B	1C		N09-2921-08	SCREW (3X10)		
C	1A, 2B		N89-3008-45	BINDING HEAD TAPTITE SCREW		
D	1B		N89-3008-46	BINDING HEAD TAPTITE SCREW		
ELECTRICAL UNIT						
C1			CK45FF1H223Z	CERAMIC	0.022UF	Z
C3			CK45FF1H223Z	CERAMIC	0.022UF	Z
C4			CE04KW1C470M	ELECTRØ	47UF	16WV
C5			CK45FF1H103Z	CERAMIC	0.010UF	Z
C6 -8			CK45FF1H223Z	CERAMIC	0.022UF	Z
C9			CE04KW1C470M	ELECTRØ	47UF	16WV
C10			CK45FF1H223Z	CERAMIC	0.022UF	Z
C11			CE04KW1HR47M	ELECTRØ	0.47UF	50WV
C12			CC45FSL1H101J	CERAMIC	100PF	J
C13 ,14			CE04KW1C100M	ELECTRØ	10UF	16WV
C15			SH1125900145	CERAMIC	2200PF	K
C16			CE04KW1HR22M	ELECTRØ	0.22UF	50WV
C16			CE04KW1HR33M	ELECTRØ	0.33UF	50WV
C17			CE04KW1H010M	ELECTRØ	1.0UF	50WV
C18			CE04KW1H3R3M	ELECTRØ	3.3UF	50WV
C19			CE04KW1H2R2M	ELECTRØ	2.2UF	50WV
C20			CE04KW1E4R7M	ELECTRØ	4.7UF	25WV
C21 -23			CK45FF1H223Z	CERAMIC	0.022UF	Z
C24			CE04KW1C100M	ELECTRØ	10UF	16WV
C25			CC45SL1H220J	CERAMIC	22PF	J
C26		*	SH1015900044	CERAMIC	0.01UF	J
C27			CK45FB1E102K	CERAMIC	1000PF	K
C28 -30			CE04KW1C100M	ELECTRØ	10UF	16WV
C31 ,32			CC45FSL1H221J	CERAMIC	220PF	J
C31 ,32			CC45SL1H390J	CERAMIC	39PF	J
C33 ,34		*	SH1125900164	CERAMIC	3300PF	J
C35 ,36			SH1125900162	CERAMIC	0.012UF	J

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

⚠ indicates safety critical components.



## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
T-47/L (UNIT)						
601	1A	*	A01-3125-08	METALIC CABINET	ET XMI	
602	2A	*	A60-0556-08	PANEL ASSY		
602	2A	*	A60-0557-08	PANEL ASSY		
607	2A	*	SH1101580791	FRONT GLASS	X ET	
-			B46-0096-33	WARRANTY CARD		
-			B46-0310-03	WARRANTY CARD		
		*	H50-0831-08	ITEM CARTON CASE	ET MI X	
		*	H50-0832-08	ITEM CARTON CASE		
		*	H50-1014-08	ITEM CARTON CASE		
-		*	H10-5732-08	POLYSTYRENE FOAMED FIXTURE L		
-		*	H10-5733-08	POLYSTYRENE FOAMED FIXTURE R		
-		*	H12-2186-08	PACKING FIXTURE		
-		*	H25-1513-08	PROTECTION BAG		
610	2C	*	SH1101230060	FOOT REAR		
630	1A	*	K29-5889-08	KNØB TIMER		
631	1A	*	K29-5890-08	KNØB 10 KEY		
632	2B	*	K29-5891-08	KNØB BAND		
633	1A	*	K29-5892-08	KNØB PROGRAM		
634	2A	*	K29-5893-08	KNØB TUNING		
A	1C		N09-2706-05	TAPTITE SCREW (3X8)		
B	1C		N09-2921-08	SCREW (3X10)		
C	1A, 2B		N89-3008-45	BINDING HEAD TAPTITE SCREW		
D	1B		N89-3008-46	BINDING HEAD TAPTITE SCREW		
ELECTRICAL UNIT						
C1			CK45FF1H223Z	CERAMIC 0.022UF Z		
C3			CK45FF1H223Z	CERAMIC 0.022UF Z		
C4			CE04KW1C470M	ELECTRØ 47UF 16WV		
C5			CK45FF1H103Z	CERAMIC 0.010UF Z		
C6 -8			CK45FF1H223Z	CERAMIC 0.022UF Z		
C9			CE04KW1C470M	ELECTRØ 47UF 16WV		
C10			CK45FF1H223Z	CERAMIC 0.022UF Z		
C11			CE04KW1HR47M	ELECTRØ 0.47UF 50WV		
C12			CC45FSL1H101J	CERAMIC 100PF J		
C13 ,14			CE04KW1C100M	ELECTRØ 10UF 16WV		
C15			SH1125900145	CERAMIC 2200PF K		
C16			CE04KW1HR22M	ELECTRØ 0.22UF 50WV		
C16			CE04KW1HR33M	ELECTRØ 0.33UF 50WV		
C17			CE04KW1H010M	ELECTRØ 1.0UF 50WV		
C18			CE04KW1H3R3M	ELECTRØ 3.3UF 50WV		
C19			CE04KW1H2R2M	ELECTRØ 2.2UF 50WV		
C20			CE04KW1E4R7M	ELECTRØ 4.7UF 25WV		
C21 -23			CK45FF1H223Z	CERAMIC 0.022UF Z		
C24			CE04KW1C100M	ELECTRØ 10UF 16WV		
C25			CC45SL1H220J	CERAMIC 22PF J		
C26		*	SH1015900044	CERAMIC 0.01UF J		
C27			CK45FB1E102K	CERAMIC 1000PF K		
C28 -30			CE04KW1C100M	ELECTRØ 10UF 16WV		
C31 ,32			CC45FSL1H221J	CERAMIC 220PF J	ET XMI	
C31 ,32			CC45SL1H390J	CERAMIC 39PF J		
C33 ,34		*	SH1125900164	CERAMIC 3300PF J		
C35 ,36			SH1125900162	CERAMIC 0.012UF J	XMI	

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)


T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

 indicates safety critical components.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C37 ,38			CC45SL1H221K	CERAMIC 220PF K	ET XMI	
C39 ,40			SH1205900093	CERAMIC 4700PF 25WV		
C41			CE04KW1C100M	ELECTRØ 10UF 16WV		
C42 ,43			CE04KW1H010M	ELECTRØ 1.0UF 50WV		
C45			CE04KW1H010M	ELECTRØ 1.0UF 50WV		
C46			CE04KW1HR22M	ELECTRØ 0.22UF 50WV		
C47			CE04KW1C470M	ELECTRØ 47UF 16WV		
C48		*	SH1305900119	CERAMIC 0.047UF M		
C49			CK45FF1H473Z	CERAMIC 0.047UF Z	XMI XMI	
C50			CC45RH1H150J	CERAMIC 15PF J		
C51			CK45FF1H473Z	CERAMIC 0.047UF Z	ET ET ET ET	
C52			CK45FF1H223Z	CERAMIC 0.022UF Z		
C53			CC45CH1H180J	CERAMIC 18PF J		
C54			CQ09FS1H471J	POLYSTY 470PF J		
C55			CC45CH1H180J	CERAMIC 18PF J		
C56			CQ09FS1H681J	POLYSTY 680PF J	ET ET ET ET	
C57			CC45UJ1H270J	CERAMIC 27PF J		
C58			CQ09FS1H221J	POLYSTY 220PF J		
C59			CC45UJ1H270J	CERAMIC 27PF J		
C60			CK45FF1H223Z	CERAMIC 0.022UF Z		
C61 ,62			CC45CH1H150J	CERAMIC 15PF J		
C63 -65			CC45SL1H471K	CERAMIC 470PF K		
C66			CK45FF1H223Z	CERAMIC 0.022UF Z		
C67			CE04KW1C470M	ELECTRØ 47UF 16WV		
C68			SH1205900091	CERAMIC 0.027UF J		
C69			CE04KW1H2R2M	ELECTRØ 2.2UF 50WV	ET XMI	
C69			CE04KW1H4R7M	ELECTRØ 4.7UF 50WV		
C70 ,71			CC45SL1H221K	CERAMIC 220PF K		
C72			CK45FF1H103Z	CERAMIC 0.010UF Z		
C75			CK45FF1H223Z	CERAMIC 0.022UF Z		
C76 ,77			CE04KW1H101M	ELECTRØ 100UF 50WV		
C78		*	SH1425900118	ELECTRØ 220UF 50WV		
C79		*	SH1305900815	ELECTRØ 330UF 50WV		
C80			CE04KW1E102M	ELECTRØ 1000UF 25WV	XMI ET	
C80			CE04KW1E222M	ELECTRØ 2200UF 25WV		
C81			CE04KW1E101M	ELECTRØ 100UF 25WV		
C82			CE04KW1C101M	ELECTRØ 100UF 16WV		
C83 ,84			CE04KW1H100M	ELECTRØ 10UF 50WV		
C85			CE04KW1C470M	ELECTRØ 47UF 16WV		
C86			CE04KW1A471M	ELECTRØ 470UF 10WV		
C87			C90-1827-05	BACKUP 0.047F 5.5WV		
C88			CK45FF1H223Z	CERAMIC 0.022UF Z		
C89			CC45FSL1H221J	CERAMIC 220PF J		
C89			CC45SL1H680J	CERAMIC 68PF J		
C90			CE04KW1C470M	ELECTRØ 47UF 16WV	ET XMI	
C91 -94		*	SH1305900815	ELECTRØ 330UF 50WV		
C95			CC45SL1H221K	CERAMIC 220PF K		
C96			CC45SL1H220J	CERAMIC 22PF J		
C99			SH1305900596	CERAMIC 0.022UF 25WV		
C101			CK45FF1H223Z	CERAMIC 0.022UF Z	ET ET ET	
C102			CE04KW1E222M	ELECTRØ 2200UF 25WV	XMI	
C500			CE04KW1H2R2M	ELECTRØ 2.2UF 50WV		
C501			CK45FF1H223Z	CERAMIC 0.022UF Z		
C502			CC45CH1H270J	CERAMIC 27PF J		
C503			CC45CH1H330J	CERAMIC 33PF J		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

 indicates safety critical components.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
C506		*	SH1305900745	CERAMIC 0.1UF J		
C507		*	SH1255940009	NP ELECT 10UF 25WV		
C508			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C509		*	SH1305900721	CERAMIC 0.1UF Z		
C511			CE04KW1V101M	ELECTRO 100UF 35WV		
C512			C90-3506-08	CERAMIC 0.047UF Z		
T01		*	C05-0224-08	TRIM CAP LW RF ADJ	ET	
T02		*	C05-0225-08	TRIM CAP MW RF ADJ	ET	
CP3		*	E58-0007-08	FLAT CABLE CONNECTOR POWER		
S01			E20-0476-05	TERMINAL BOARD ANTENNA	XMI	
S02			E20-0321-05	TERMINAL BOARD ANTENNA	ET	
CF1 ,2		*	L72-0579-08	CERAMIC FILTER	ET	
CF1 ,2		*	L72-0580-08	CERAMIC FILTER	XMI	
CF3			L72-0096-05	AM OSC		
CF4			L78-0286-05	RESONATOR 456kHz		
L1			L40-2281-17	SMALL FIXED INDUCTOR (0.22UH)		
L500,501			L40-2291-17	SMALL FIXED INDUCTOR (2.2UH)		
T1		*	L30-0908-08	FM IFT		
T2		*	L30-0909-08	AM IFT		
T3		*	L39-1326-08	LOW PASS FILTER	ET	
T4		*	L39-1327-08	AM OSC	XMI	
T5		*	L31-0611-08	RF COIL	ET	
T6		*	L31-0612-08	RF COIL	ET	
T7		*	L32-0564-08	OSCILLATING COIL	ET	
T8		*	L32-0565-08	OSCILLATING COIL	ET	
T9 ,10		*	L35-0071-08	MPX FILTER		
T11		*	L19-0074-08	BALUN COIL	ET	
XL1			L77-1122-05	CRYSTAL RESONATOR 7.20MHz		
XL500			L77-1175-05	CRYSTAL RESONATOR 4.19MHz		
△ FR2			SH1105810605	FUSE-R 6.8 J 1/4W		
R74 ,75			RD14BB2H101J	RD 100 J 1/2W		
R97		*	SH1105810673	RS 330 J 1W	XMI	
R107		*	SH1105810664	RS 270 J 2W		
R112-117		*	SH1105810663	RS 120 J 2W	ET	
R112-117		*	SH1105810677	RS 150 J 2W	XMI	
VR1 ,2			R12-3688-05	TRIM POT 47K B-WIDTH,T-LEVEL		
VR3			R12-3688-05	TRIM POT 47K SEPARATION	ET	
VR3			R12-5652-05	TRIM POT 220K SEPARATION	XMI	
S1		*	S60-0025-08	SLIDE SWITCH CH-SPAN	XMI	
S500-526		*	S70-0024-08	TACT SWITCH KEY BOARD		
S527		*	S60-0026-08	ROTARY SWITCH TUNING		
D1 ,2			1SS133	DIODE	ET	
D3 -8			1SS133	DIODE		
△ D9 -15		*	RL104T	DIODE		
D16 -18			1SS133	DIODE		
D19		*	RL104T	DIODE	XMI	
D500-509			1SS133	DIODE		
D510,511			1SS133	DIODE	ET	
D512			1SS133	DIODE	XMI	
D513-516			1SS133	DIODE		
D517			1SS133	DIODE	XMI	
D518,519			1SS133	DIODE		
FL500			FIP11AM7R	INDICATOR TUBE		

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

△ indicates safety critical components.



## PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
IC1		*	LA1265S	IC(AM/FM TUNER)		
IC2			LA3401	IC(FM MPX)		
IC3			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC500		*	IX2201	IC(MICROPROCESSOR)		
Q1			2SC3800	TRANSISTOR		
Q2 -4			2SC1740SR	TRANSISTOR	ET	
Q5			DTC144ES	DIGITAL TRANSISTOR	ET	
Q6			DTC144ES	DIGITAL TRANSISTOR		
Q7			DTA144WS	DIGITAL TRANSISTOR	XMI	
Q8 ,9			2SC1740SR	TRANSISTOR		
Q12			2SA933SR	TRANSISTOR	ET	
Q13 ,14			2SA933SR	TRANSISTOR		
Q15 ,16			2SC1740SR	TRANSISTOR		
Q18			2SD2012	TRANSISTOR		
Q19			2SA933SR	TRANSISTOR		
Q20			DTC114ES	DIGITAL TRANSISTOR		
Q21			2SC1740SR	TRANSISTOR		
Q22			DTC114YS	DIGITAL TRANSISTOR		
Q23			2SD1858R3	TRANSISTOR		
Q24			2SC1740SR	TRANSISTOR		
Q500			DTC144ES	DIGITAL TRANSISTOR		
Q501			2SC1740SR	TRANSISTOR		
Q502			2SA933SR	TRANSISTOR	XMI	
VD1		*	KV1236Z23F	VARI-CAP DIODE	ET	
ZD1		*	MTZJ12BT	ZENER DIODE		
ZD2		*	MTZJ6R2C	ZENER DIODE		
ZD3			MTZJ16A	ZENER DIODE		
ZD4		*	MTZJ5.1A	ZENER DIODE		
ZD500			MTZJ6.2B	ZENER DIODE		
FE1		*	W02-1183-08	TUNER MODULR	ET	
FE1		*	W02-1184-08	TUNER MODULE	MX	

L:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

X:Australia

M:Other Areas

⚠ indicates safety critical components.

# T-47/L

## SPECIFICATIONS

### T-47

#### FM tuner section

Tuning frequency range ..... 87.5MHz~108MHz  
Antenna impedance ..... 300Ω balanced/  
75Ω unbalanced

Sensitivity (IHF) ..... 10.8dBf (0.95μV at 75Ω)

#### 50dB quieting sensitivity

MONO ..... 22.1dBf (3.5μV at 75Ω)

STEREO ..... 44.3dBf (45μV at 75Ω)

#### Total harmonic distortion at 1,000Hz

MONO ..... 0.4%

STEREO ..... 0.5%

#### Signal to noise ratio at 65dBf (IHF)

MONO ..... 76dB

STEREO ..... 68dB

Selectivity (IHF ±400kHz) ..... 50dB

Stereo separation (IHF at 1kHz) ..... 40dB

Frequency response ..... 30Hz~15kHz, +0.5dB, -3.0dB

#### AM Tuner section

#### Tuning frequency range

9kHz step ..... 531kHz~1,602kHz

10kHz step ..... 530kHz~1,610kHz

Usable sensitivity ..... 13μV/(500μV/m)

Total harmonic distortion ..... 0.6%

Signal to noise ratio ..... 50dB

#### General

Dimensions ..... W : 360 mm

H : 94 mm

D : 326 mm

Weight ..... 3.0kg

### T-47L

#### Sezione sintonizzatore FM

Gamma sintonizzazione frequenze ..... 87,5MHz~108MHz

Impedenza antenna ..... 75 Ω non bilanciata

#### Sensibilità (DIN)

MONO ..... 0,6μV

STEREO ..... 25μV

#### Distorsione armonica totale

(a 1.000Hz, 65,2dBf ingresso, DIN)

MONO ..... 0,3%

STEREO ..... 0,8%

#### Rapporto S/R

(DIN pesato ad 1kHz, 65,2dBf di ingresso)

MONO ..... 70dB

STEREO ..... 63dB

Sensibilità (DIN ±300kHz) ..... 64dB

Separazione stereo (DIN a 1kHz) ..... 42dB

Risposta in frequenza ..... 30Hz~15kHz, +0,5dB, -3,0dB

#### Sezione sintonizzatore MW

Campo di frequenza ..... 531kHz~1.602kHz

Sensibilità utilizzabile ..... 13μV/(500μV/m)

Distorsione armonica totale ..... 0,6%

Rapporto S/R ..... 50dB

#### Sezione sintonizzatore LW

Campo di frequenza ..... 153kHz~281kHz

Sensibilità utilizzabile ..... 20μV

Distorsione armonica totale ..... 0,6%

Rapporto S/R ..... 47dB

#### Generalità

Dimensioni ..... L : 360 mm

A : 94 mm

P : 326 mm

Peso (netto) ..... 3,0kg

KENWOOD follows a policy of continuous advancements in development.  
For this reason specifications may be changed without notice.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement.

Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

KENWOOD strebt ständige Verbesserungen in der Entwicklung an.

Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

#### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

## KENWOOD CORPORATION

Alive Mitake, 2-5, 1-chome Shibuya, Shibuya-ku, Tokyo 150, Japan

#### KENWOOD SERVICE CORPORATION

PO. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745, U.S.A.

#### KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

#### KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. BOX 55-2791, Piso 6 Plaza Chase, Cl. 47 y Aquilino de la Guardia, Panama, Republic de Panama

#### TRIO-KENWOOD U.K. LIMITED

Kenwood House, Dwight Road, Watford, Herts, WD1 8EB, United Kingdom

#### KENWOOD ELECTRONICS BENELUX N.V.

Mechelsesteenweg 418 B-1930 Zaventem, Belgium

#### KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

#### TRIO-KENWOOD FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

#### KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sirtori, 7/9 20129 Milano, Italy

#### KENWOOD ESPANA S.A.

Bolivia, 239-08020 Barcelona, Spain

#### KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.

(A.C.N. 001 499 074)  
P.O. BOX 504, 8 Figtree Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

#### KENWOOD & LEE ELECTRONICS, LTD.

Unit 37/12-3724, Level 37 Tower 1, Metroplaza, 223 Hing Fong Road,

Kwai Fong N.T. Hong Kong

#### KENWOOD ELECTRONICS SINGAPORE PTE LTD

No. 1 Genting Lane #07-00, Singapore, 1334

